



Query	1501	aaagatcttgagcctctgagacggccacaggtttggtatcatcatagcgggaataa	1557
Db	1501	aaagatcttgagcctctgagacggccacaggtttggtatcatcatagcgggaataa	1557
RESULT 2			
US-09-531-914-2			
: Sequence 2, Application US/09531914			
: Patent No. 6267956			
: GENERAL INFORMATION:			
: APPLICANT: ZENECA Limited			
: TITLE OF INVENTION: PROTEIN ACTIVATOR OF APOPTOSIS			
: FILE REFERENCE: PHM.70536			
: CURRENT APPLICATION NUMBER: US/09/531.914			
: CURRENT FILING DATE: 2000-03-21			
: PRIOR APPLICATION NUMBER: 09/329,418			
: PRIOR FILING DATE: 1999-06-11			
: NUMBER OF SEQ ID NOS: 39			
: SOFTWARE: FastSeq for Windows Version 3.0			
: SEQ ID NO 2			
: LENGTH: 1557			
: TYPE: DNA			
: ORGANISM: Homo Sapiens			
US-09-531-914-2			
Query Match			
	99.5%	Score 1548.6;	DB 4; Length 1557;
	Best Local Similarity	99.6%;	Pred. No. 0;
	Matches 1551;	Conservative 1;	Mismatches 5; Indels 0; Gaps
QY	1	atgtctgtgtgtcgaagtatgtgcccaggtgtgtcccccccttgtgtgtccatccagaa	60
Db	1	atgtctgtgtgtcgaagtatgtgcccaggtgtgtcccccccttgtgtgtccatccagaa	60
QY	61	cttgagaaaccagggagcctctgtcgaaagacgggtcttgacagtggttcctggcgcaacat	120
Db	61	cttgagaaaccagggagcctctgtcgaaagacgggtcttgacagtggttcctggcgcaacat	120
QY	121	aggagaagtgtgggtctacgattgtgtcgttcgaatacgttaaacctcgaaagcgatataccagggag	180
Db	121	aggagaagtgtgggtctacgattgtgtcgttcgaatacgttaaacctcgaaagcgatataccagggag	180
QY	181	gtcaagagccatgtgcgaagtcctgtgataacgaattccgtgttcgacctagaagaagggtattccag	240
Db	181	gtcaagagccatgtgcgaagtcctgtgataacgaattccgtgttcgacctagaagaagggtattccag	240
QY	241	aagttgtaactgtggaacaaagatcccaaacccgggtctctgtgtataattcatatcgagaacggc	300
Db	241	aagttgtaactgtggaacaaagatcccaaacccgggtctctgtgtataattcatatcgagaacggc	300
QY	301	tccctgtcgggtgtcgtctgcacagttcccaatgtgcctcgtgcgcctcttccttcgcgcctg	360
Db	301	tccctgtcgggtgtcgtctgcacagttcccaatgtgcctcgtgcgcctcttccttcgcgcctg	360
QY	361	ctgaagaagaatgtgtgtcttggtggaatgttttacctgtacagacccaagaaccgggtgtctctgcac	420
Db	361	ctgaagaagaatgtgtgtcttggtggaatgttttacctgtacagacccaagaaccgggtgtctctgcac	420
QY	421	cggaagactcaagggatcccaacggtctctgtcgggaacccaaggtctgaatcgaatcgaagctgtgcagat	480
Db	421	cggaagactcaagggatcccaacggtctctgtcgggaacccaaggtctgaatcgaatcgaagctgtgcagat	480
QY	481	tttgcctgtgtccacattctcaggagggtctcacaagtgtcacaagtgacaggaggtccggagccagg	540
Db	481	tttgcctgtgtccacattctcaggagggtctcacaagtgtcacaagtgacaggaggtccggagccagg	540
QY	541	ggcaacctgtgtactattgtgccccaagaactgtttgtttaacgttaaacgggaagggctctcac	600
Db	541	ggcaacctgtgtactattgtgccccaagaactgtttgtttaacgttaaacgggaagggctctcac	600
QY	601	ggcagtgtaagcttatacagcttcctggagatctcctaagtgtggcagaagcttctgtctgtaagaagaagt	660
Db	601	ggcagtgtaagcttatacagcttcctggagatctcctaagtgtggcagaagcttctgtctgtaagaagaagt	660

## BEST AVAILABLE COPY

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: August 13, 2002, 21:14:38 ; Search time 24.14 Seconds

(Without alignments)  
555.140 Million cell updates/sec

Title: US-09-762-491-6  
Perfect score: 2774  
Sequence: 1 MSCVKLMPGAPAPLVISIDE.....PKDEAWSRPQGMNHSKZ 519

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep.\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep.\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep.\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep.\*  
5: /cgn2\_6/ptodata/2/1aa/PTUS.COMB.pep.\*  
6: /cgn2\_6/ptodata/2/1aa/backfilest1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2750	99.1	518	3	US-09-329-418-3
2	2750	99.1	518	4	US-09-531-914-3
3	2747	99.0	518	3	US-09-329-418-5
4	2747	99.0	518	4	US-09-531-914-5
5	2742	98.8	518	3	US-09-329-418-4
6	2742	98.8	518	4	US-09-531-914-4
7	2722	98.1	518	3	US-09-329-418-9
8	2722	98.1	518	4	US-09-531-914-9
9	2145.5	77.3	420	3	US-09-329-418-8
10	2145.5	77.3	420	4	US-09-531-914-8
11	1358	49.0	261	3	US-09-329-418-6
12	1358	49.0	261	4	US-09-531-914-6
13	1305	47.0	240	3	US-09-329-418-7
14	1305	47.0	240	4	US-09-531-914-7
15	445.5	16.1	656	1	US-08-444-005-15
16	445.5	16.1	656	4	US-09-069-023-28
17	423	15.2	671	4	US-09-112-118-2
18	423	15.2	709	1	US-08-444-005-17
19	407	14.7	787	4	US-09-188-950-334
20	379	13.7	531	4	US-09-069-023-1
21	379	13.7	540	3	US-09-019-942-1
22	379	13.7	540	4	US-09-069-041A-2
23	379	13.7	540	4	US-09-069-023-27
24	377	13.6	536	4	US-09-188-930-185
25	376	13.6	530	4	US-09-093-041A-4
26	376	13.6	500	4	US-09-069-023-3
27	335.5	12.1	478	4	US-09-069-023-4

28	321	11.6	264	4	US-09-069-023-7	Sequence 7, Appl1
29	302	10.9	263	3	US-09-035-706-5	Sequence 5, Appl1
30	302	10.9	263	3	US-08-955-841-5	Sequence 5, Appl1
31	302	10.9	263	4	US-09-390-425-5	Sequence 5, Appl1
32	302	10.9	821	1	US-07-928-464-2	Sequence 2, Appl1
33	302	10.9	821	1	US-08-003-111B-2	Sequence 2, Appl1
34	302	10.9	821	1	US-08-261-432-2	Sequence 2, Appl1
35	302	10.9	821	5	PCT-US93-07347-2	Sequence 2, Appl1
36	290.5	10.5	513	2	US-08-357-533A-10	Sequence 10, Appl1
37	290.5	10.5	513	2	US-08-459-009-10	Sequence 10, Appl1
38	290.5	10.5	513	2	US-08-300-584-2	Sequence 2, Appl1
39	290.5	10.5	513	3	US-08-459-951-10	Sequence 10, Appl1
40	290.5	10.5	513	4	US-08-738-168B-13	Sequence 13, Appl1
41	290.5	10.5	513	4	US-08-476-123-2	Sequence 2, Appl1
42	290.5	10.5	521	4	US-08-738-168B-5	Sequence 5, Appl1
43	287.5	10.4	516	2	US-08-357-533A-2	Sequence 2, Appl1
44	287.5	10.4	516	2	US-08-459-009-2	Sequence 2, Appl1
45	287.5	10.4	516	3	US-08-459-951-2	Sequence 2, Appl1

## ALIGNMENTS

RESULT 1  
US-09-329-418-3  
; Sequence 3, Application US/09329418  
; Patent No. 6096539  
; GENERAL INFORMATION:  
; APPLICANT: ZENECA Limited  
; TITLE OF INVENTION: PROTEIN ACTIVATOR OF APOPTOSIS  
; FILE REFERENCE: PHM.70536  
; CURRENT APPLICATION NUMBER: US/09/329,418  
; CURRENT FILING DATE: 1999-06-11  
; NUMBER OF SEQ. ID NOS.: 39  
; SOFTWARE: FASTSEQ for Windows Version 3.0  
; SEQ. ID NO 3  
; LENGTH: 518  
; TYPE: PRT  
; ORGANISM: Homo Sapiens  
US-09-329-418-3

Query Match 99.1%; Score 2750; DB 3; Length 518;  
Best Local Similarity 99.4%; Pred. No. 1.7e-210;  
Matches 515; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY	1	MSCVKLMPGAPAPLVISIELENOELVGKGFVFRQHRKMGYDAVKIVNSKAISRE	60
DB	1	MSCVKLMPGAPAPLVISIELENOELVGKGFVFRQHRKMGYDAVKIVNSKAISRE	60
QY	61	VKMAASLDNEFVLRLGEGYIEKVNMDOPKPALVYKPKFENGSLGILLOSQCRPMPILCRL	120
DB	61	VKMAASLDNEFVLRLGEGYIEKVNMDOPKPALVYKPKFENGSLGILLOSQCRPMPILCRL	120
QY	121	LKEVVLGMFYLDHPNLYLHRDLKPSNVLDPDELHVKLADFGSLFGGSGSGSGEPG	180
DB	121	LKEVVLGMFYLDHPNLYLHRDLKPSNVLDPDELHVKLADFGSLFGGSGSGSGEPG	180
QY	181	GTGLYLAPELFLVNNRKRASTASDVYSGILMAYVLAGEVLPPEPSLYAVCNRRNP	240
DB	181	GTGLYLAPELFLVNNRKRASTASDVYSGILMAYVLAGEVLPPEPSLYAVCNRRNP	240
QY	241	SLATLPQAGPTPELEGIKELMOLCMSEPKDRSPFOCLPKTDEVCVMNNNAAVST	300
DB	241	SLATLPQAGPTPELEGIKELMOLCMSEPKDRSPFOCLPKTDEVCVMNNNAAVST	300
QY	301	VKDELSQLKSSNRFFSIPESGGGTMDGFRRTIENHSRDVAVSEWLNKLNLEPPSS	360
DB	301	VKDELSQLKSSNRFFSIPESGGGTMDGFRRTIENHSRDVAVSEWLNKLNLEPPSS	360
QY	361	VPKRCPSLTKRSRAOEQVPAWTAAGTSSDSMAOPQTPETSTFRNOMPSTSTGTSPG	420
DB	361	VPKRCPSLTKRSRAOEQVPAWTAAGTSSDSMAOPQTPETSTFRNOMPSTSTGTSPG	420

OY 421 PRGNGAEROGMMNSCRTPEPNPTGRPLVNIYNSGVQVGDNNYLTMOQTALPTWGLA 480  
 DB 421 PRGNGAEROGMMNSCRTPEPNPTGRPLVNIYNSGVQVGDNNYLTMOQTALPTWGLA 480  
 OY 481 PSGKRGLOHPPVGSOGCPKDPKPEAMSRPOGMWYNSGK 518  
 DB 481 PSGKRGLOHPPVGSOGCPKDPKPEAMSRPOGMWYNSGK 518

RESULT 2  
 US-09-531-914-3  
 : Sequence 3, Application US/09531914  
 : Patent No. 6267956  
 : GENERAL INFORMATION:  
 : APPLICANT: ZENECA Limited  
 : TITLE OF INVENTION: PROTEIN ACTIVATOR OF APOPTOSIS  
 : FILE REFERENCE: PHM.70536  
 : CURRENT APPLICATION NUMBER: US/09/531,914  
 : PRIOR FILING DATE: 1999-06-11  
 : NUMBER OF SEQ ID NOS: 39  
 : SOFTWARE: FastSeq for Windows Version 3.0  
 : SEQ ID NO 3  
 : LENGTH: 518  
 : TYPE: PRT  
 : ORGANISM: Homo Sapiens  
 : US-09-531-914-3

Query Match 99.1%; Score 2750; DB 4; Length 518;  
 Best Local Similarity 99.4%; Pred. No. 1,7e-210;  
 Matches 515; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 MSCVYKLPSCGAPAPLVSTIEELNDELVGKDGFTVFAOHRKMGDYAVKIVNSKALSIRE 60  
 DB 1 MSCVYKLPSCGAPAPLVSTIEELNDELVGKDGFTVFAOHRKMGDYAVKIVNSKALSIRE 60  
 OY 61 VKAMASLDNEFEVLRLGVIEKVNMDOPKPAVTKFMENGLSGLLSQCRRPMPPLCRL 120  
 DB 61 VKAMASLDNEFEVLRLGVIEKVNMDOPKPAVTKFMENGLSGLLSQCRRPMPPLCRL 120  
 OY 121 LKEVYLMGFYLDONPVYLLHRDLKPSNVLPPELVKLADEGLSTFOGSGSGTSGSGEPG 180  
 DB 121 LKEVYLMGFYLDONPVYLLHRDLKPSNVLPPELVKLADEGLSTFOGSGSGTSGSGEPG 180  
 OY 181 GTIGYLAPELFEVNVNRRKASTASDVYSGILMAVLAGREVELPTEPSLYEAVCNRRNP 240  
 DB 181 GTIGYLAPELFEVNVNRRKASTASDVYSGILMAVLAGREVELPTEPSLYEAVCNRRNP 240  
 OY 241 SLAELPQAGPETPGLGKELMQLCWSSEPKDRPSFOECLEKTEDEVFQMVENNNMAAVST 300  
 DB 241 SLAELPQAGPETPGLGKELMQLCWSSEPKDRPSFOECLEKTEDEVFQMVENNNMAAVST 300  
 OY 301 VKDFLSQLKSSNRRTSIPESGGGTENDGFRRTIENQHSRNDVYSEWLKLNLEEPSS 360  
 DB 301 VKDFLSQLKSSNRRTSIPESGGGTENDGFRRTIENQHSRNDVYSEWLKLNLEEPSS 360  
 OY 361 VPKKCPSLTKRSRAOEQVPOAMTAGTSSDSMAOPROTPESTRNOMPSTSTGTSPSG 420  
 DB 361 VPKKCPSLTKRSRAOEQVPOAMTAGTSSDSMAOPROTPESTRNOMPSTSTGTSPSG 420  
 OY 421 PRGNGAEROGMMNSCRTPEPNPTGRPLVNIYNSGVQVGDNNYLTMOQTALPTWGLA 480  
 DB 421 PRGNGAEROGMMNSCRTPEPNPTGRPLVNIYNSGVQVGDNNYLTMOQTALPTWGLA 480  
 OY 481 PSGKRGLOHPPVGSOGCPKDPKPEAMSRPOGMWYNSGK 518  
 DB 481 PSGKRGLOHPPVGSOGCPKDPKPEAMSRPOGMWYNSGK 518

RESULT 3

US-09-329-418-5  
 : Sequence 5, Application US/09329418  
 : Patent No. 6096539  
 : GENERAL INFORMATION:  
 : APPLICANT: ZENECA Limited  
 : TITLE OF INVENTION: PROTEIN ACTIVATOR OF APOPTOSIS  
 : FILE REFERENCE: PHM.70536  
 : CURRENT APPLICATION NUMBER: US/09/329,418  
 : PRIOR FILING DATE: 1999-06-11  
 : SOFTWARE: FastSeq for Windows Version 3.0  
 : SEQ ID NO 5  
 : LENGTH: 518  
 : TYPE: PRT  
 : ORGANISM: Dattifical Sequence  
 : FEATURE:  
 : OTHER INFORMATION: Dominant Negative Mutant Embodiment  
 : US-09-329-418-5

Query Match 99.0%; Score 2747; DB 3; Length 518;  
 Best Local Similarity 99.2%; Pred. No. 2.9e-210;  
 Matches 514; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

OY 1 MSCVYKLPSCGAPAPLVSTIEELNDELVGKDGFTVFAOHRKMGDYAVKIVNSKALSIRE 60  
 DB 1 MSCVYKLPSCGAPAPLVSTIEELNDELVGKDGFTVFAOHRKMGDYAVKIVNSKALSIRE 60  
 OY 61 VKAMASLDNEFEVLRLGVIEKVNMDOPKPAVTKFMENGLSGLLSQCRRPMPPLCRL 120  
 DB 61 VKAMASLDNEFEVLRLGVIEKVNMDOPKPAVTKFMENGLSGLLSQCRRPMPPLCRL 120  
 OY 121 LKEVYLMGFYLDONPVYLLHRDLKPSNVLPPELVKLADEGLSTFOGSGSGTSGSGEPG 180  
 DB 121 LKEVYLMGFYLDONPVYLLHRDLKPSNVLPPELVKLADEGLSTFOGSGSGTSGSGEPG 180  
 OY 181 GTIGYLAPELFEVNVNRRKASTASDVYSGILMAVLAGREVELPTEPSLYEAVCNRRNP 240  
 DB 181 GTIGYLAPELFEVNVNRRKASTASDVYSGILMAVLAGREVELPTEPSLYEAVCNRRNP 240  
 OY 241 SLAELPQAGPETPGLGKELMQLCWSSEPKDRPSFOECLEKTEDEVFQMVENNNMAAVST 300  
 DB 241 SLAELPQAGPETPGLGKELMQLCWSSEPKDRPSFOECLEKTEDEVFQMVENNNMAAVST 300  
 OY 301 VKDFLSQLKSSNRRTSIPESGGGTENDGFRRTIENQHSRNDVYSEWLKLNLEEPSS 360  
 DB 301 VKDFLSQLKSSNRRTSIPESGGGTENDGFRRTIENQHSRNDVYSEWLKLNLEEPSS 360  
 OY 361 VPKKCPSLTKRSRAOEQVPOAMTAGTSSDSMAOPROTPESTRNOMPSTSTGTSPSG 420  
 DB 361 VPKKCPSLTKRSRAOEQVPOAMTAGTSSDSMAOPROTPESTRNOMPSTSTGTSPSG 420  
 OY 421 PRGNGAEROGMMNSCRTPEPNPTGRPLVNIYNSGVQVGDNNYLTMOQTALPTWGLA 480  
 DB 421 PRGNGAEROGMMNSCRTPEPNPTGRPLVNIYNSGVQVGDNNYLTMOQTALPTWGLA 480  
 OY 481 PSGKRGLOHPPVGSOGCPKDPKPEAMSRPOGMWYNSGK 518  
 DB 481 PSGKRGLOHPPVGSOGCPKDPKPEAMSRPOGMWYNSGK 518

RESULT 4  
 US-09-531-914-5  
 : Sequence 5, Application US/09531914  
 : Patent No. 6267956  
 : GENERAL INFORMATION:  
 : APPLICANT: ZENECA Limited  
 : TITLE OF INVENTION: PROTEIN ACTIVATOR OF APOPTOSIS  
 : FILE REFERENCE: PHM.70536  
 : CURRENT APPLICATION NUMBER: US/09/531,914  
 : PRIOR FILING DATE: 1999-06-11